

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001357

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H03F 1/02, H03F 3/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 6472934 B1 (DAVID R. PEHLKE), 29 October 2002 (29.10.2002), column 2, line 66 - column 3, line 54 -- | 1-23 |
| A | US 6252461 B1 (FREDERICK HERBERT RAAB), 26 June 2001 (26.06.2001), column 621 - column 8, line 67, figure 17 -- | 1-23 |
| A | US 20030076166 A1 (RICHARD HELLBERG), 24 April 2003 (24.04.2003), [0016]-[0019] -- | 1-23 |

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

21 Sept 2004

Date of mailing of the international search report

08-02-2005

Name and mailing address of the ISA/

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C (Continuation). . DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 6262629 B1 (ROBERT E. STENGEL), 17 July 2001 (17.07.2001), column 8, line 45 - column 9, line 16 -- | 1-23 |
| A | US 5786727 A (BERNARD EUGENE SIGMON), 28 July 1998 (28.07.1998), column 2, line 12 - column 4, line 34 -- | 1-23 |
| A | US 5025225 A1 (YUSUKE TAJIMA ET AL), 18 June 1991 (18.06.1991), column 1, line 49 - column 2, line 23 -- ----- | 1-23 |

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PCT/SE 2004/001357

| | | | | | | |
|-------|-------------|----|------------|----|---------------|------------|
| US | 6472934 | B1 | 29/10/2002 | EP | 1346469 A | 24/09/2003 |
| | | | | WO | 02054589 A | 11/07/2002 |
| <hr/> | | | | | | |
| US | 6252461 | B1 | 26/06/2001 | US | 6552634 B | 22/04/2003 |
| <hr/> | | | | | | |
| US | 20030076166 | A1 | 24/04/2003 | AU | 1426401 A | 14/05/2001 |
| | | | | AU | 6446101 A | 17/12/2001 |
| | | | | AU | 6645001 A | 17/12/2001 |
| | | | | BR | 0015195 A | 18/06/2002 |
| | | | | CA | 2387745 A | 10/05/2001 |
| | | | | CA | 2411450 A | 13/12/2001 |
| | | | | EP | 1230216 A | 14/08/2002 |
| | | | | EP | 1301988 A | 16/04/2003 |
| | | | | EP | 1301989 A | 16/04/2003 |
| | | | | IL | 149098 D | 00/00/0000 |
| | | | | JP | 2003513071 T | 08/04/2003 |
| | | | | JP | 2003536312 T | 02/12/2003 |
| | | | | JP | 2003536313 T | 02/12/2003 |
| | | | | NO | 20022009 A | 02/07/2002 |
| | | | | NZ | 518450 A | 30/04/2004 |
| | | | | SE | 516145 C | 26/11/2001 |
| | | | | SE | 520760 C | 19/08/2003 |
| | | | | SE | 0002148 A | 26/11/2001 |
| | | | | SE | 0004420 A | 07/12/2001 |
| | | | | US | 6639464 B | 28/10/2003 |
| | | | | US | 6750242 B | 15/06/2004 |
| | | | | US | 20030076167 A | 24/04/2003 |
| | | | | WO | 0195480 A | 13/12/2001 |
| | | | | WO | 0195481 A | 13/12/2001 |
| | | | | EP | 1410571 A | 21/04/2004 |
| | | | | SE | 519446 C | 25/02/2003 |
| | | | | SE | 0101201 A | 05/10/2002 |
| | | | | US | 20040137845 A | 15/07/2004 |
| | | | | WO | 02082742 A | 17/10/2002 |
| <hr/> | | | | | | |
| US | 6262629 | B1 | 17/07/2001 | WO | 0103289 A | 11/01/2001 |
| <hr/> | | | | | | |

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PCT/SE 2004/001357

| | | | | | | | |
|----|---------|---|------------|----|------------|-----|------------|
| US | 5786727 | A | 28/07/1998 | DE | 69729466 | D,T | 11/11/2004 |
| | | | | EP | 0932933 | A,B | 04/08/1999 |
| | | | | SE | 0932933 | T3 | |
| | | | | JP | 2001502493 | T | 20/02/2001 |
| | | | | KR | 2000049254 | A | 25/07/2000 |
| | | | | TW | 399362 | B | 00/00/0000 |
| | | | | WO | 9816997 | A | 23/04/1998 |

| | | | | | | | |
|----|---------|----|------------|------|--|--|--|
| US | 5025225 | A1 | 18/06/1991 | NONE | | | |
|----|---------|----|------------|------|--|--|--|
